

# **Code Amendment Proposal Application**

Department of Consumer & Business Services Building Codes Division

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Read the entire code amendment proposal application before completing this form. Please complete all parts before submitting your proposal and refer to the provided checklist.

APPLICANT INFORMATION		
Name: Mike Moore		Date: August 25, 2022
Representing (if applicable): Stator LLC, representing Broan-NuTone		Work phone: 303.408.7015
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#### PROPOSAL INFORMATION

Specialty code: Oregon Residential Specialty Code

Code section(s): M1504.3

Briefly explain the subject of your proposal: In alignment with the 2024 IRC, approve factory-built intake/exhaust combination termination fittings to help reduce costs associated with specification of ORSC-compliant balanced ventilation systems.

### INSTRUCTIONS AND CHECKLIST

Fill in all the information above and submit this page, signed and dated, with the required supplementary information for Parts I, II, III, and IV described on page 2 of this application. This application may be submitted by mail to the mailing address above, or by email to BCD.PTSPtech@oregon.gov.

Summary checklist for the applicant:

Part I Code amendment language is attached in the proper format.

Part II Amendment proposal requirements for amending the code have been reviewed.

Part III Amendment proposal criteria questions have been answered and are attached.

Part IV If applicable, additional ORSC energy efficiency amendment proposal information is attached.

Note: One application is required for each code section you are proposing to amend. If this proposal requires changes in other sections of the code for alignment, include those changes as part of this application.

## APPLICANT SIGNATURE

Signature: The Moore Da

Date: August 25, 2022

Copyright notice: By signing this Code Amendment Proposal Application, I understand and acknowledge that the work contained in this application is original, or if not original, I have the right to copy the work. By signing this work, I understand that any rights I may have in this work, including any form of derivative works and compilations, are assigned to the Department of Consumer and Business Services Building Codes Division. I also understand that I do not retain or acquire any rights once this work is used in a Department of Consumer and Business Services Building Codes Division publication.

# Part I - Code Amendment Language

Proposal: Modify the 2021 ORSC as follows:

M1504.3 Exhaust openings. Air exhaust openings shall terminate as follows:

- 1. Not less than 3 feet (914 mm) from property lines.
- 2. Not less than 3 feet (914 mm) from gravity air intake openings, operable windows and doors.
- 3. Not less than 10 feet (3048 mm) from mechanical air intake openings except where either of the following apply:
- 3.1. The exhaust opening is located not less than 3 feet (914 mm) above the air intake opening.
- 3.2 The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the fan manufacturer's instructions, and the exhaust air is drawn from a living space.
- 4. Openings shall comply with Sections R303.5.2 and R303.6.

**Rationale**: This modification would align Section M1504.3 of the ORSC with the 2024 IRC, via approval of RM12-21 PC1. This proposal was developed by the ICC Plumbing/Mechanical/Gas Code Committee (PMGCAC), established by the ICC Board of Directors in 2011. The following rationale was presented by the PMGCAC within proposal RM12-21 during the development of the 2024 IRC:

Intake/exhaust combination terminations are regularly installed with heating and energy recovery ventilators (H/ERVs) used for dwelling units. Their use reduces building penetrations, labor, and associated system costs. By reducing the number of penetrations, air leakage can also be reduced, resulting in space conditioning energy savings. Further, the durability of the structure can be improved through reducing entry pathways for bulk water. Manufacturer tests conducted by Natural Resources Canada (NRC) have demonstrated that use of intake/exhaust combination terminations results in minimum cross-contamination of airflows (i.e., not exceeding 4%; see NRC report A1-007793). These results are aligned with ASHRAE 62.2 approval of such devices, which limits cross-contamination to 10%, as verified by the manufacturer. If approved, this proposed modification to the IRC would limit application of intake/exhaust combination terminations to "approved", "factory-built" units. Approval of this proposed modification is expected to result in more affordable and architecturally flexible terminations. Note: The IRC defines living space as, "space within a dwelling unit utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes."

Bibliography: Ouazia, B. 2016. Evaluation of a dual hood performance in term of contaminant re-entrainment from exhaust to supply. A1-007793. National Research Council Canada. For a copy of the report, please contact the proponent.

# Part II - Code Amendment Proposal Requirements

This proposal is enforceable by the ORSC.

#### Part III - ORSC Amendment Proposal Criteria

**Implementation:** The proposed provision would be enforced by confirming that, where installed, a factory-built combination termination is:

- 1. Factory-built (i.e., not fabricated on-site)
- 2. Installed in accordance with manufacturer instructions (this is standard code language, and manufacturer instructions for installing these devices are straight-forward)
- 3. Configured to draw its exhaust air from a living space. Living space is defined by the ORSC as "space within a dwelling unit utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes" and would exclude combustion appliances and spaces such as garages, crawls, sub-slab, and attics.

No additional inspections or permits are proposed. There is also no need for additional equipment, training, tests, or special certifications.

**Fiscal Impact:** The code change proposal could decrease the cost of construction by providing builders with additional alternatives for compliance.

**Impacted stakeholders and other specialty codes**: This proposal is based on text in the 2024 IRC that was developed by the ICC PMGCAC. The proposal does not impact other specialty codes or statewide programs; however, mirroring this proposal in future versions of Oregon's Mechanical Specialty Code is recommended.